

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Attorney Docket No. **020431.0742**

In re Application of:

**JAMES M. CRAWFORD, ET AL.**

Serial No. **09/675,415**

Filed: **29 SEPTEMBER 2000**

For: **SYSTEM AND METHOD FOR  
RENDERING CONTENT ACCORDING  
TO AVAILABILITY DATA FOR  
ONE OR MORE ITEMS**

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Examiner:

**RAQUEL ALVAREZ**

Art Unit: **3622**

Confirmation No. **9669**

**AMENDED APPEAL BRIEF**

**MAIL STOP: APPEAL BRIEF - PATENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir/Madam:

This Amended Appeal Brief is filed in response to the Notification of Non-Compliant Appeal Brief dated 14 June 2006, for which a response is due on 16 July 2007 (since 14 July 2007 is a Saturday).

This is an appeal from the Final Rejection dated 12 February 2004, rejecting Claims 1-43 in the present Application. A Notice of Appeal was filed on 4 August 2004 with the requisite statutory fee.

**Real Party in Interest (37 C.F.R. § 41.37(c)(1)(i)):**

This application is currently owned by i2 Technologies US, Inc., as indicated by:  
an assignment recorded on May 11, 2001, in the Assignment Records of the United States Patent and Trademark Office at Reel 011809, Frames 0552-0558; and  
an assignment recorded on July 30, 2001, in the Assignment Records of the United States Patent and Trademark Office at Reel 012037, Frames 0870-0882.

**Related Appeals and Interferences (37 C.F.R. § 41.37(c)(1)(ii)):**

No known appeals, interferences, or judicial proceedings are related to or will directly affect or have a bearing on the Board's decision on this Appeal. The Board's decision on this Appeal will not affect any known appeals, interferences, or judicial proceedings.

**Status of Claims (37 C.F.R. § 41.37(c)(1)(iii)):**

Claims 1-43 are pending in this application and all stand rejected under a Final Office Action mailed February 12, 2004. Appellants present Claims 1-43 for appeal. Appendix A shows all pending claims.

**Status of Amendments (37 C.F.R. § 41.37(c)(1)(iv)):**

The Examiner has entered all amendments filed subsequent to the Final Office Action mailed February 12, 2004.

**Summary of Claimed Subject Matter (37 C.F.R. § 41.37(c)(1)(v)):**

Independent Claims 1, 15, 29, and 30 relate, in general to systems, methods, or software for rendering content according to availability data for at least one item. An example of this type of system is shown in Figure 1. In this example, the system 10 includes one or more users 12, a content server 14, an availability server 16, and one or more suppliers 18.

Claims 1, 15, 29, and 30 define a content server 14 which receives a content request from a user 12, which may be a request for a particular web page of a website associated with content server 14. (at least at, Page 6, Lines 4-6). In response, content server 14 retrieves the requested web page and determines that the web page includes an advertisement or other content concerning a product, service, or other item. (at least at, Page 6, Lines 6-8). Content server 14 accesses an availability server 16 to obtain availability data for the item, which may be obtained from one or more suppliers 18 of the item, and renders content for the web page according to the availability data. (at least at, Page 6, Lines 9-11). Content server 14 communicates the rendered web page to user 12. (at least at, Page 6, Lines 11-12). Rendering content concerning an item according to availability data for the item may greatly decrease the likelihood that the item will be unavailable for purchase, timely delivery, or otherwise in response to user 12 receiving the requested content. (at least at, Page 6, Lines 12-15). Availability data obtained from suppliers 18 may include any suitable information relating to an item, such as inventory data (e.g., the item is in excess or in short supply), delivery data (e.g., the item cannot be delivered until a certain date), pricing data (e.g., the current price of the item), or any other suitable availability data. (at least at, Page 7, Lines 20-23).

Another feature of system 10 is the ability to process a request for a web page from a user 12. Accordingly, content server 14 includes a web server 22 that processes a request for a web page from a user 12, identifies the web page according to its URL or otherwise, and instructs a rendering engine 24 to retrieve the web page and render it for communication to user 12. (at least at, Page 11, Line 31, through Page 12 Line 1). A web page 26 may include one or more containers 28 each containing one or more rules 30 that

specify the availability data to be retrieved from availability server 16 and the conditions to be applied to that retrieved availability data to determine the rendered content of web page 26. (at least at, Page 12, Lines 1-4). For example, where web page 26 contains HTML, the HTML corresponding to container 28 may be determined according to rules 30 of container 28, while the HTML for the other portions of web page 26 may be static or otherwise unaffected by the interpretation of these rules 30. (at least at, Page 12, Lines 4-8). If the requested web page 26 includes a container 28 having one or more rules 30, then rendering engine 24 instructs a rules engine 32 to interpret rules 30 so that the appropriate content may be incorporated into web page 26 to replace container 28. (at least at, Page 12, Lines 8-11). In response, rules engine 32 interprets rules 30, communicates one or more availability requests to availability server 16 to obtain availability data used in applying rules 30, applies rules 30, and retrieves HTML or other suitable content for incorporation in web page 26 based on the application of rules 30. (at least at, Page 12, Lines 11-15). Rendering engine 24 continues processing web page 26 and, assuming all containers 28 and associated rules 30 have been appropriately processed, completes the rendering of web page 26. (at least at, Page 12, Lines 15-17). Finally, web server 22 communicates the rendered web page 26 incorporating targeted content to user 12. (at least at, Page 12, Lines 17-18).

According to an exemplary method, the system 10 provides a process for rendering content according to availability data for at least one item. An example of this type of method is shown in Figure 3. This example begins at step 100, where user 12 communicates a request for content to the content server 14, in the form of an HTTP request containing the URL for a particular web page 26 or otherwise. (at least at, Page 15, Lines 21-24). At step 102, web server 22 retrieves the requested web page 26 and, at step 104, rendering engine 24 begins processing web page 26 to render it for communication to user 12. (at least at, Page 15, Lines 24-26). At step 106, rendering engine 24 may encounter a container 28 within web page 26 containing one or more rules 30 and, in response, will instruct rules engine 32 to interpret rules 30 within the container 28 at step 108. (at least at, Page 15, Lines 26-29). Rules engine 32 interprets rules 30 at step 110, identifying one or more associated conditions, and communicates one or more availability requests corresponding to the conditions to availability server 16 at step 112.

(at least at, Page 15, Lines 29-31). Rules engine 32 may interpret one or more rules 30 and may communicate availability requests for one or more conditions serially, simultaneously, or in any other appropriate manner. (at least at, Page 15, Lines 31-33).

Availability server 16 retrieves the requested availability data, perhaps from one or more appropriate suppliers 18 at step 114 and communicates the availability data to rules engine 32 at step 116. (at least at, Page 16, Lines 1-3). At step 118, rules engine 32 applies one or more conditions to the availability data serially, simultaneously, or in any other suitable manner and, at step 120, incorporates content into web page 26 according to the availability data. (at least at, Page 16, Lines 3-5). Rendering engine 24 continues processing web page 26 at step 122 to render it for communication to user 12. (at least at, Page 16, Lines 6-7). If rendering engine 24 encounters another container 28 at step 124, the method returns to step 108 for interpretation of the associated rules 30. (at least at, Page 16, Lines 7-8). If rendering engine 24 does not encounter another container 28 at step 124, rendering engine 32 completes its processing of web page 26 at step 126 and completely renders web page 26 at step 128 for communication to user 12. (at least at, Page 16, Lines 9-11). At step 130, web server 22 communicates web page 26 to user 12, and the method ends. (at least at, Page 16, Lines 11-12).

**A. Independent Claim 1**

Independent Claim 1 is directed towards a system for rendering content according to availability data for at least one item. The system comprising a server operable to receive a content request from a user in a current interactive session (at least at, Page 6, Lines 4-8) and, in response to the user-supplied content request, to retrieve the user-requested content and a rendering engine coupled to the server and operable to identify at least one rule within the user-requested content and concerning the item. (at least at, Page 6, Lines 6-11).

The system further comprising a rules engine coupled to the rendering engine and operable to generate at least one availability request corresponding to the rule and concerning the item, receive availability data for the item, retrieve additional content according to the availability data for the item, the additional content being selected from

among one or more stored content elements that concern the item, and communicate the additional content concerning the item to the rendering engine for incorporation in the user-requested content. (at least at, Page 12, Lines 8-18).

The rendering engine is further operable to render the user-requested content, including the additional content concerning the item and the server is further operable to communicate the rendered user-requested content to the user in the current interactive session to satisfy the user-supplied content request. (at least at, Page 6, Lines 4-15, Page 11, Lines 15-30, and Page 12, Lines 19-30).

**B. Independent Claim 15**

Independent Claim 15 is directed towards a method of rendering content according to availability data for at least one item. The method comprises receiving a content request from a user in a current interactive session (at least at, Page 6, Lines 4-8), retrieving the user-requested content in response to the user-supplied content request, and identifying at least one rule within the user-requested content and concerning the item. (at least at, Page 6, Lines 6-11).

The method further comprises generating at least one availability request that corresponds to the rule and that concerns the item, receiving availability data for the item, retrieving additional content according to the availability data for the item, the additional content being selected from among one or more stored content elements that concern the item, and incorporating the additional content into the user-requested content. (at least at, Page 12, Lines 8-18).

The method still further comprises rendering the user-requested content, including the additional content concerning the item and communicating the rendered user-requested content to the user in the current interactive session to satisfy the user-supplied content request. (at least at, Page 6, Lines 4-15, Page 11, Lines 15-30, and Page 12, Lines 19-30).

**C. Independent Claim 29**

Independent Claim 29 is directed towards software for rendering content according to availability data for at least one item, the software being embodied in a computer-readable medium and operable to receive a content request from a user in a current interactive session (at least at, Page 6, Lines 4-8), retrieve the user-requested content in response to the user-supplied content request, identify at least one rule within the user-requested content and concerning the item. (at least at, Page 6, Lines 6-11).

The software further operable to generate at least one availability request that corresponds to the rule and that concerns the item, receive availability data for the item, retrieve additional content according to the availability data for the item, where the additional content is selected from among one or more stored content elements that concern the item, incorporate the additional content concerning the item into the user-requested content. (at least at, Page 12, Lines 8-18).

The software still further operable to render the user-requested content, including the additional content concerning the item and communicate the rendered user-requested content to the user in the current interactive session to satisfy the user-supplied content request. (at least at, Page 6, Lines 4-15, Page 11, Lines 15-30, and Page 12, Lines 19-30).

**D. Independent Claim 30**

Independent Claim 30 is directed towards a system for rendering content according to availability data for at least one item. The system comprising means for receiving a content request from a user in a current interactive session (at least at, Page 6, Lines 4-8) and for retrieving the user-requested content in response to the user-supplied content request, and means for identifying at least one rule within the user-requested content and concerning the item. (at least at, Page 6, Lines 6-11).

The system further comprising means for generating at least one availability request that corresponds to the rule and that concerns the item, receiving availability data for the item, retrieving additional content according to the availability data for the item, where the additional content is selected from among one or more stored content elements

that concern the item, and incorporating the additional content concerning the item into the user-requested content. (at least at, Page 12, Lines 8-18).

The system still further comprising means for identifying the rule comprising means for rendering the user-requested content, including the additional content concerning the item and means for receiving the user-supplied content request comprising means for communicating the rendered user-requested content to the user in the current interactive session to satisfy the user-supplied content request. (at least at, Page 6, Lines 4-15, Page 11, Lines 15-30, and Page 12, Lines 19-30).

**Grounds of Rejection to be Reviewed on Appeal (37 C.F.R. § 41.37(c)(1)(vi)):**

Issue No. 1. Claims 1, 4-5, 8-13, 15, 18-19, 22-27, 29-30, 33-34, and 37-42 presently stand rejected under 35 U.S.C. § 102(b) over U.S. Patent No. 5,774,868 to Cragun et al. ("*Cragun*"). Thus, the issue is whether this reference includes sufficient disclosure in order to anticipate the invention as set forth in the claims.

Issue No. 2. Claims 6-7, 14, 20-21, 28, 35-36, and 43 presently stand rejected under 35 U.S.C. § 103(a) over *Cragun*. Thus, the issue is whether the teachings of this reference disclose or suggest all of the limitations of the claims as necessary for establishing a *prima facie* case of obviousness, and whether the teachings of this reference can properly be considered modifiable so as to establish a *prima facie* case of obviousness.

Issue No. 3. Claims 2-3, 16-17, and 31-32 presently stand rejected under 35 U.S.C. § 103(a) over *Cragun* in view of U.S. Patent No. 6,266,649 to Linden et al. ("*Linden*"). Thus, the issue is whether the teachings of these references disclose or suggest all of the limitations of the claims as necessary for establishing a *prima facie* case of obviousness, and whether the teachings of these reference can properly be considered modifiable so as to establish a *prima facie* case of obviousness.

**Argument (37 C.F.R. § 41.37(c)(1)(vii)):**

The rejection of Claims 1, 4-5, 8-13, 15, 18-19, 22-27, 29-30, 33-34, and 37-42 based on *Cragun* under 35 U.S.C. § 102(b) is improper, and the Board should withdraw the rejection. The rejection of Claims 6-7, 14, 20-21, 28, 35-36, and 43 based on *Cragun* under 35 U.S.C. § 103(a) is improper, and the Board should withdraw the rejection. The rejection of Claims 2-3, 16-17, and 31-32 based on *Cragun* in view of *Linden* under 35 U.S.C. § 103(a) is improper, and the Board should withdraw the rejection.

**I. Claims 1, 4-15, 18-30, 33-43 are Patentable over *Cragun***

**A. Overview**

The Examiner rejects Claims 1, 4-15, 18-30, 33-43 under *Cragun*.

**B. Standard**

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987); M.P.E.P. ch. 2131 (Rev. 1, Feb. 2003) (Quoting *Verdegaal Bros.*, 814 F.2d at 631, 2 U.S.P.Q.2d at 1053). Moreover, "the identical invention must be shown in as complete detail as is contained . . . in the claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1266, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989); M.P.E.P. ch. 2131 (Rev. 1, Feb. 2003) (Quoting *Richardson*, 868 F.2d at 1236, 9 U.S.P.Q.2d at 1920). Furthermore, the "elements must be arranged as in the claim under review." *In re Bond*, 910 F.2d 831, 833, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990); M.P.E.P. ch. 2131 (Rev. 1, Feb. 2003) (Quoting *In Re Bond*, 910 F.2d at 833, 15 U.S.P.Q.2d at 1566).

**C. *Cragun***

*Cragun* merely discloses an automatic sales promotion selection system that collects purchase transaction data, analyzes the data relating to a particular customer

purchase, and selects a sales promotion calculated to result in additional purchases. (Column 2, Lines 22-27). In the automatic sales promotion selection system, a computer system communicates with customer information devices and billing terminals. (Column 1, Line 66, through Column 2, Line 3). As a customer purchases items, the customer information devices (such as sales registers located throughout a store or data terminals operated by clerks at order desks) collect information concerning the purchase. (Column 2, Lines 3-8). The purchase information is passed on to the computer system, which shares the information with the billing terminals, which generate appropriate sales receipts or invoices. (Column 2, Lines 8-12).

The computer system analyzes the collected purchase information for a customer to segment the items purchased into purchase classes including groups of items ordinarily purchased together. (Column 2, Lines 12-15). The computer system then uses neural networks to identify items missing from a purchase that are members of a purchase class otherwise represented in the purchase. (Column 2, Lines 15-18). The missing items can then be the subject of a purchase suggestion, an automatically dispensed coupon, or other sales promotion indicated by an output device, such as a printer or display terminal. (Column 2, Lines 18-22).

#### ***D. Claims 1, 4-15, 18-30, 33-43***

The Examiner rejects Claims 1, 4-15, 18-30, 33-43 under *Cragun*. Appellants respectfully submit that Claims 1, 4-15, 18-30, 33-43 are clearly patentable over *Cragun*.

Claims 1, 4-15, 18-30, 33-43 are separately patentable from all other claims subject to the same rejection and recite limitations that are substantially different from limitations recited in all other claims. Therefore, Appellants discuss Claims 1, 4-15, 18-30, 33-43 together separately from all other claims.

Independent Claim 1 recites:

A system for rendering content according to availability data for at least one item, comprising:  
a server operable to receive a content request from a user in a

current interactive session and, in response to the user-supplied content request, to retrieve the user-requested content;

a rendering engine coupled to the server and operable to identify at least one rule within the user-requested content and concerning the item; and

a rules engine coupled to the rendering engine and operable to:  
generate at least one availability request corresponding to the rule and concerning the item;

receive availability data for the item;

retrieve additional content according to the availability data for the item, the additional content being selected from among one or more stored content elements that concern the item; and

communicate the additional content concerning the item to the rendering engine for incorporation in the user-requested content;

the rendering engine further operable to render the user-requested content, including the additional content concerning the item;

the server further operable to communicate the rendered user-requested content to the user in the current interactive session to satisfy the user-supplied content request.

Independent Claims 15 and 29-30 recite limitations substantially similar to limitations recited in independent Claim 1.

To reject independent Claim 1, the Examiner asserts that both the automatic sales promotion selection system and the neural network purchase advisor subsystem in *Cragun* can be properly considered **a rules engine**, as recited in independent Claim 1. The Examiner also asserts that the output device in *Cragun* can be properly considered **a rendering engine**, as recited in independent Claim 1. Appellants disagree with the Examiner.

The automatic sales promotion selection system and the neural network purchase advisor subsystem in *Cragun* cannot be properly considered **a rules engine**, as recited in independent Claim 1. To be properly considered **a rules engine**, as recited in independent Claim 1, the automatic sales promotion selection system and the neural network purchase advisor subsystem in *Cragun* would at a minimum, as recited in independent Claim 1, have to:

- **generate at least one availability request corresponding to the rule and concerning the item;**

- *receive availability data for the item;*
- *retrieve additional content according to the availability data for the item, the additional content being selected from among one or more stored content elements that concern the item; and*
- *communicate the additional content concerning the item to the rendering engine for incorporation in the user-requested content.*

Nowhere does *Cragun* disclose, teach, or suggest that the automatic sales promotion selection system or the neural network purchase advisor subsystem in *Cragun* ***generates at least one availability request corresponding to the rule and concerning the item***, as recited in independent Claim 1. In *Cragun*, a computer system merely analyzes collected purchase information for a customer to segment the items purchased into purchase classes of items ordinarily purchased together and uses a neural network purchase advisor subsystem to identify items missing from a purchase that are members of a purchase class otherwise represented in the purchase. (Column 4, Lines 12-15). The neural network purchase advisor subsystem in *Cragun* makes use of probability threshold values that limit a number of items identified as missing from a purchase to only items having a sufficiently high probability of actually belonging to the purchase class. (Column 4, Lines 15-18; Column 5, Lines 49-56). As discussed above, an output device then generates a purchase suggestion, an automatically dispensed coupon, or other sales promotion indicating the identified missing items. (Column 4, Lines 18-22). Nothing in *Cragun* discloses, teaches, or even suggests that, to identify items missing from a purchase to generate a sale promotion, the automatic sales promotion selection system or the neural network purchase advisor subsystem in *Cragun* ***generates any availability request***, much less ***at least one availability request corresponding to the rule and concerning the item***, as recited in independent Claim 1. Similarly, nothing in *Cragun* discloses, teaches, or even suggests that, to identify items missing from a purchase to generate a sale promotion, the automatic sales promotion selection system or the neural network purchase advisor subsystem in *Cragun* ***receives availability data for the item***, as recited in independent Claim 1.

Because *Cragun* fails to disclose, teach, or suggest ***generating at least one availability request corresponding to the rule and concerning the item*** and also fails to disclose, teach, or suggest ***receiving availability data for the item***, as recited in independent Claim 1, *Cragun* also necessarily fails to disclose, teach, or suggest ***retrieving additional content according to the availability data for the item, the additional content being selected from among one or more stored content elements that concern the item***, as recited in independent Claim 1.

The output device in *Cragun* cannot be properly considered ***a rendering engine***, as recited in independent Claim 1. To be properly considered ***a rendering engine***, as recited in independent Claim 1, the output device in *Cragun* would at a minimum, as recited in independent Claim 1, have to:

- ***identify at least one rule within the user-requested content and concerning the item; and***
- ***render the user-requested content, including the additional content concerning the item that has been retrieved according to the availability data for the item and selected front among one or more stored content elements that concern the item.***

Nowhere does *Cragun* disclose, teach, or suggest that the output device in *Cragun* ***identifies at least one rule within the user-requested content and concerning the item***, as recited in independent Claim 1. As discussed above, the output device in *Cragun* is merely a printer or display terminal that receives item identifiers of likely purchases and generates a purchase suggestion, an automatically dispensed coupon, or another sales promotion. *Cragun* makes no disclosure, teaching, or suggestion whatsoever that the output device in *Cragun* in any way ***identifies at least one rule***, much less at least one rule ***within the user-requested content***, as recited in independent Claim 1. Moreover, nowhere does *Cragun* disclose, teach, or suggest that the output device in *Cragun* ***renders the user-requested content, including the additional content concerning the item***, as recited in independent Claim 1. Even assuming for the sake of argument that generating a purchase suggestion, an automatically dispensed coupon, or another sales promotion

could be properly considered **rendering content**, as recited in independent Claim 1, *Cragun* would still fail to disclose, teach, or suggest **rendering the user-requested content, including the additional content concerning the item**, as recited in independent Claim 1. Nothing in *Cragun* even suggests that a purchase suggestion, an automatically dispensed coupon, or another sales promotion from the output device in *Cragun* is **user-requested**, as recited in independent Claim 1. In fact, *Cragun* teaches away from output of the output device in *Cragun* being **user-requested**. As Appellants have pointed out, the automatic sales promotion selection system in *Cragun* collects purchase transaction data, analyzes the data relating to a particular customer purchase, and selects a sales promotion calculated to result in additional purchases automatically and without the customer knowing that such a process is taking place. Therefore, a purchase suggestion, an automatically dispensed coupon, or another sales promotion from the output device in *Cragun* could not possibly be **user-requested**, as recited in independent Claim 1.

Moreover, because as discussed above *Cragun* fails to disclose, teach, or suggest a **rendering engine** and **user-requested content**, as recited in independent Claim 1, *Cragun* also necessarily fails to disclose, teach, or suggest **communicating the additional content concerning the item to the rendering engine for incorporation in the user-requested content** as recited in independent Claim 1.

For at least these reasons, *Cragun* fails to disclose, teach, or suggest all elements of independent Claims 1, 15, 29, and 30. Independent Claims 1, 15, 29, and 30 are therefore clearly patentable over *Cragun*. Because dependent Claims 4-14, 18-28, and 33-43 depend on independent Claims 1, 15, and 29, respectively, dependent Claims 4-14, 18-28, and 33-43 are also clearly patentable over *Cragun*.

The Examiner rejects Claims 6-7, 14, 20-21, 28, 35-36, and 43 under 35 U.S.C. § 103(a) under *Cragun*. Because dependent Claims 6-7 and 14 depend on independent Claim 1, dependent Claims 20-21 and 28 depend on independent Claim 15, and dependent Claims 35-36 and 43 depend on independent Claim 29, dependent Claims 6-7, 14, 20-21, 28, 35-36, and 43 are also clearly patentable over *Cragun*.

## **II. Claims 2-3, 16-17, and 31-32 are Patentable over the Proposed *Cragun-Linden* Combination**

### **A. Overview**

The Examiner rejects Claims 2-3, 16-17, and 31-32 based on *Cragun* in view of *Linden*.

### **B. Standard**

The question raised under 35 U.S.C. § 103 is whether the prior art taken as a whole would suggest the claimed invention taken as a whole to one of ordinary skill in the art at the time of the invention. *See* 35 U.S.C. § 103(a) (2000). Accordingly, even if all elements of a claim are disclosed in various prior art references, which is certainly not the case here as discussed below, the claimed invention taken as a whole cannot be said to be obvious without some reason given in the prior art why one of ordinary skill at the time of the invention would have been prompted to modify the teachings of a reference or combine the teachings of multiple references to arrive at the claimed invention.

The M.P.E.P. sets forth the strict legal standard for establishing a *prima facie* case of obviousness based on modification or combination of prior art references:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references where combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure.

M.P.E.P. ch. 2142 (Rev. 2, May 2004) (citations omitted). "To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. All words in a claim must be considered in judging the patentability of that claim against the prior art." M.P.E.P. ch. 2143.03 (Rev. 2, May 2004) (citations omitted).

In addition, the M.P.E.P. and the Federal Circuit repeatedly warn against using an applicant's disclosure as a blueprint to reconstruct the claimed invention. For example, the M.P.E.P. states, "The tendency to resort to 'hindsight' based upon applicant's disclosure is often difficult to avoid due to the very nature of the examination process. However, impermissible hindsight must be avoided and the legal conclusion must be reached on the basis of the facts gleaned from the prior art." M.P.E.P. ch. 2142 (Rev. 2, May 2004). The governing Federal Circuit cases are equally clear:

A critical step in analyzing the patentability of claims pursuant to [35 U.S.C. § 103] is casting the mind back to the time of invention, to consider the thinking of one of ordinary skill in the art, guided only by the prior art references and the then-accepted wisdom in the field.... Close adherence to this methodology is especially important in cases where the very ease with which the invention can be understood may prompt one "to fall victim to the insidious effect of a hindsight syndrome wherein that which only the invention taught is used against its teacher."

*In re Kotzab*, 217 F.3d 1365, 1369, 55 U.S.P.Q.2d 1313, 1316 (Fed. Cir. 2000) (citations omitted).

### ***C. Cragun***

Please refer to Section I.C, above, for a discussion of *Cragun*.

### ***D. Linden***

*Linden* merely discloses a user selecting a hyperlink from a web page to invoke an instant recommendations service that generates recommendations based exclusively on a purchase history and an item ratings profile of the user. (Column 14 Lines 14-26). The service is available to the user if the user has purchased or rated a threshold number of items in a product group. (Column 14 Lines 27-31). If the user has established multiple shopping carts, the user may also designate a shopping cart for generating recommendations. (Column 14 Lines 31-34).

**E. Claims 2, 16, and 31**

The Examiner rejects dependent Claims 2, 16, and 31 based on *Cragun* in view of *Linden*. Appellants submit that dependent Claims 2, 16, and 31 are clearly patentable over the proposed *Cragun-Linden* combination.

Dependent Claims 2, 16, and 31 are separately patentable from every other claim subject to the same rejection and recite limitations that are substantially different from limitations recited in all other claims. Therefore, Appellants discuss dependent Claims 2, 16, and 31 together separately from all other claims.

Dependent Claims 2, 16, and 31 depend on independent Claims 1, 15, and 29, respectively. Therefore, dependent Claims 2, 16, and 31 are allowable over the proposed *Cragun-Linden* combination for at least the reasons stated above with respect to independent Claims 1, 15, and 29.

Moreover, Appellants submit that the proposed *Cragun-Linden* combination cannot be properly used to reject dependent Claims 2, 16, and 31. The Examiner has failed to show the required teaching, suggestion, or motivation in *Cragun*, *Linden*, or knowledge generally available to a person having ordinary skill in the art at the time of the invention to combine *Cragun* with *Linden* as proposed. The Examiner merely states:

It would have been obvious . . . to have included the teachings of *Linden* of the server being a web server and that the request comprises a Hypertext Transfer Protocol request containing a Uniform Resource Locator for a particular page because such a modification would provide world wide access to the system.

Thus, the Examiner merely asserts that it would have been obvious to combine *Cragun* with *Linden* as proposed to achieve a certain purported result, i.e., to "provide world wide access to the system." Appellants submit that, for at least the following reasons, such an assertion fails to demonstrate that *Cragun*, *Linden*, or knowledge generally available to a person having ordinary skill in the art at the time of the invention provide any teaching, suggestion, or motivation to make the proposed combination, as governing Federal Circuit case law and the M.P.E.P. require. Appellants further submit that

such an assertion fails to demonstrate that a person having ordinary skill in the art at the time of the invention would have reasonably expected the proposed *Cagun-Linden* combination to achieve the purported results, as governing Federal Circuit case law and the M.P.E.P. further require.

Nowhere does the Examiner demonstrate, with respect to the proposed combination, that *Cragun, Linden*, or knowledge generally available to a person having ordinary skill in the art at the time of the invention provide any teaching, suggestion, or motivation whatsoever to make the proposed combination. The Examiner merely asserts that combining the system of *Linden* with the system of *Cragun* "would provide world wide access to the system," without even attempting to demonstrate that such a teaching, suggestion, or motivation can be found in *Cragun, Linden*, or knowledge generally available to a person having ordinary skill in the art at the time of the invention. If the Examiner intends to assert that a teaching, suggestion, or motivation to combine *Linden* with *Cragun* as the Examiner proposes could have been found in information generally available to a person having ordinary skill in the art at the time of the invention, the Examiner must provide documentary evidence that such information was in fact generally available to a person having ordinary skill in the art at the time of the invention, as governing Federal Circuit case law and the M.P.E.P. require. The Examiner has failed to do so.

Moreover, nowhere does the Examiner demonstrate that a person having ordinary skill in the art at the time of the invention would have reasonably expected the proposed combination to achieve the purported results. First, the Examiner fails to demonstrate that the proposed combination would have in fact achieved the purported results. Nowhere does the Examiner even attempt to demonstrate that combining the system of *Linden* with the system of *Cragun* would actually "provide world wide access to the system," as the Examiner proposes. Second, even assuming for the sake of argument that the proposed combination would have produced the purported results, the Examiner fails to demonstrate that a person having ordinary skill in the art at the time of the invention would have reasonably expected such results. The Examiner merely asserts that combining the system of *Linden* with the system of *Cragun* "would provide world wide access to the

system," without even attempting to demonstrate that a person having ordinary skill in the art at the time of the invention would have reasonably expected such results. If the Examiner intends to rely on information that was generally available to a person having ordinary skill in the art at the time of the invention to demonstrate that such a person would have expected these purported results, the Examiner must provide documentary evidence that such information was in fact generally available to a person having ordinary skill in the art at the time of the invention, as governing Federal Circuit case law and the M.P.E.P. require. The Examiner has failed to do so.

For at least these reasons, dependent Claims 2, 16, and 31 are allowable over the proposed *Cragun-Linden* combination.

**F. Claims 3, 17, and 32**

The Examiner rejects dependent Claims 3, 17, and 32 based on *Cragun* in view of *Linden*. Appellants submit that dependent Claims 3, 17, and 32 are clearly patentable over the proposed *Cragun-Linden* combination.

Dependent Claims 3, 17, and 32 are separately patentable from every other claim subject to the same rejection and recite limitations that are substantially different from limitations recited in all other claims. Therefore, Appellants discuss dependent Claims 3, 17, and 32 together separately from all other claims.

Dependent Claims 3, 17, and 32 depend on independent Claims 1, 15, and 29, respectively. Therefore, dependent Claims 3, 17, and 32 are allowable over the proposed *Cragun-Linden* combination for at least the reasons stated above with respect to independent Claims 1, 15, and 29.

Moreover, Appellants submit that the proposed *Cragun-Linden* combination cannot be properly used to reject dependent Claims 3, 17, and 32. The Examiner has failed to show the required teaching, suggestion, or motivation in *Cragun* or *Linden* or in the knowledge that was generally available to a person having ordinary skill in the art at the time of the invention to combine *Cragun* with *Linden* as proposed. The Examiner merely states:

Since the combination of Cragun and Linden teach[es] rules corresponding to the recommended item[,] then it would have been obvious . . . to have included incorporating the rules into the request content because such a modification would allow for the convenience of allowing for the rules to be requested when necessary.

Thus, the Examiner merely asserts that it would have been obvious to combine *Cragun* with *Linden* as proposed to achieve a certain purported result, i.e., to "allow for the convenience of allowing for the rules to be requested when necessary." Appellants submit that, for at least the following reasons, such an assertion fails to demonstrate that *Cragun*, *Linden*, or knowledge generally available to a person having ordinary skill in the art at the time of the invention provide any teaching, suggestion, or motivation to make the proposed combination, as governing Federal Circuit case law and the M.P.E.P. require. Appellants further submit that such an assertion fails to demonstrate that a person having ordinary skill in the art at the time of the invention would have reasonably expected the proposed *Cragun-Linden* combination to achieve the purported results, as governing Federal Circuit case law and the M.P.E.P. further require.

Nowhere does the Examiner demonstrate, with respect to the proposed combination, that *Cragun*, *Linden*, or knowledge generally available to a person having ordinary skill in the art at the time of the invention provide any teaching, suggestion, or motivation whatsoever to make the proposed combination. The Examiner merely asserts that combining the system of *Linden* with the system of *Cragun* "would allow for the convenience of allowing for the rules to be requested when necessary," without even attempting to demonstrate that such a teaching, suggestion, or motivation can be found in *Cragun*, *Linden*, or knowledge generally available to a person having ordinary skill in the art at the time of the invention. If the Examiner intends to assert that a teaching, suggestion, or motivation to combine *Linden* with *Cragun* as the Examiner proposes could have been found in information generally available to a person having ordinary skill in the art at the time of the invention, the Examiner must provide documentary evidence that such information was in fact generally available to a person having ordinary skill in the art at the time of the invention, as governing Federal Circuit case law and the M.P.E.P. require. The Examiner has failed to do so.

Moreover, nowhere does the Examiner demonstrate that a person having ordinary skill in the art at the time of the invention would have reasonably expected the proposed combination to achieve the purported results. First, the Examiner fails to demonstrate that the proposed combination would have in fact achieved the purported results. Nowhere does the Examiner even attempt to demonstrate that combining the system of *Linden* with the system of *Cragun* would actually "allow for the convenience of allowing for the rules to be requested when necessary," as the Examiner proposes. Second, even assuming for the sake of argument that the proposed combination would have produced the purported results, the Examiner fails to demonstrate that a person having ordinary skill in the art at the time of the invention would have reasonably expected such results. The Examiner merely asserts that combining the system of *Linden* with the system of *Cragun* "would allow for the convenience of allowing for the rules to be requested when necessary," without even attempting to demonstrate that a person having ordinary skill in the art at the time of the invention would have reasonably expected such results. If the Examiner intends to rely on information that was generally available to a person having ordinary skill in the art at the time of the invention to demonstrate that such a person would have expected these purported results, the Examiner must provide documentary evidence that such information was in fact generally available to a person having ordinary skill in the art at the time of the invention, as governing Federal Circuit case law and the M.P.E.P. require. The Examiner has failed to do so.

For at least these reasons, dependent Claims 3, 17, and 32 are allowable over the proposed *Cragun-Linden* combination.

## **CONCLUSION:**

Appellants have demonstrated that the present invention, as claimed, is clearly patentable over the prior art cited by the Examiner. Therefore, Appellants respectfully request the Board of Patent Appeals and Interferences to reverse the final rejection of the Examiner and instruct the Examiner to issue a notice of allowance of all claims.

No fees are deemed to presently be necessary; however, the undersigned hereby authorizes the Director to charge any fees that may be required, or credit any overpayments, to **Deposit Account No. 500777**. If an extension of time is required to enable this document to be timely filed and there is no separate Petition for Extension of Time filed herewith, this document is to be construed as also constituting a Petition for Extension of Time under 37 C.F.R. § 1.136(a) for a period of time sufficient to enable this document to be timely filed. Any fee required for such Petition for Extension of Time and any other fee required by this document and not submitted herewith should be charged to **Deposit Account No. 500777**. Any refund should be credited to **Deposit Account No. 500777**.

**Please link this application to Customer No. 53184 so that its status may be checked via the PAIR System.**

Respectfully submitted,

10 July 2007

Date

/Steven J. Laureanti/signed

Steven J. Laureanti, Registration No. 50,274

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**CUSTOMER NO. 53184**

**Appendix A - Claims Appendix**  
**(37 C.F.R. § 41.37(c)(1)(viii))**

1. A system for rendering content according to availability data for at least one item, comprising:

a server operable to receive a content request from a user in a current interactive session and, in response to the user-supplied content request, to retrieve the user-requested content;

a rendering engine coupled to the server and operable to identify at least one rule within the user-requested content and concerning the item; and

a rules engine coupled to the rendering engine and operable to:

generate at least one availability request corresponding to the rule and concerning the item;

receive availability data for the item;

retrieve additional content according to the availability data for the item, the additional content being selected from among one or more stored content elements that concern the item; and

communicate the additional content concerning the item to the rendering engine for incorporation in the user-requested content;

the rendering engine further operable to render the user-requested content, including the additional content concerning the item;

the server further operable to communicate the rendered user-requested content to the user in the current interactive session to satisfy the user-supplied content request.

2. The system of Claim 1, wherein the server comprises a web server and the user-supplied content request comprises a Hypertext Transfer Protocol (HTTP) request containing a Uniform Resource Locator (URL) for a particular web page.

3. The system of Claim 1, wherein:

the user-requested content is a particular web page comprising a container that contains the rule; and

the additional content concerning the item is incorporated into the web page to replace the container.

4. The system of Claim 1, wherein the rule comprises one or more conditions concerning the item, the rules engine applying the conditions to the availability data to determine the content element concerning the item to retrieve.

5. The system of Claim 1, wherein the rule comprises a function call.

6. The system of Claim 1, wherein the availability data is selected from the group consisting of:

inventory information concerning the item;

delivery information concerning the item; and

pricing information concerning the item.

7. The system of Claim 1, wherein the availability data comprises dynamic pricing information for the item obtained from multiple suppliers of the item, the server operable to render content concerning the item that reflects the least of these prices in accordance with a promising policy.

8. The system of Claim 1, further comprising an availability server operable to receive the availability request from the rules engine, obtain the availability data from one or more suppliers, and communicate the availability data to the rules engine.

9. The system of Claim 8, wherein the availability server is further operable to generate a notification in response to a change in availability data for an item, the server operable to select alternative additional content concerning the item in response to the notification.

10. The system of Claim 8, wherein the availability server is further operable to generate a notification in response to a change in the availability data for an item to allow personnel associated with the server to adjust a policy with respect to the item.

11. The system of Claim 1, wherein the item comprises multiple components and the availability data comprises availability data for one or more components of the item.

12. The system of Claim 1, wherein additional content concerning the item comprises information selected from the group consisting of:

- an advertisement;
- a promotion; and
- an item recommendation.

13. The system of Claim 1, wherein additional content concerning the item comprises one or more item recommendations, the server operable to determine the most desirable item recommendation according to one or more sorting criteria and to render the additional content according to that determination.

14. The system of Claim 13, wherein the sorting criteria are selected from the group consisting of:

availability for the item to which the recommendation is directed;

profitability for the item to which the recommendation is directed;

one or more other performance indicators associated with the item that a seller wishes to optimize; and

a characteristic of a user to which the recommendation is to be presented.

15. A method of rendering content according to availability data for at least one item, comprising:

receiving a content request from a user in a current interactive session;

retrieving the user-requested content in response to the user-supplied content request;

identifying at least one rule within the user-requested content and concerning the item;

generating at least one availability request that corresponds to the rule and that concerns the item;

receiving availability data for the item;

retrieving additional content according to the availability data for the item, the additional content being selected from among one or more stored content elements that concern the item;

incorporating the additional content into the user-requested content;

rendering the user-requested content, including the additional content concerning the item; and

communicating the rendered user-requested content to the user in the current interactive session to satisfy the user-supplied content request.

16. The method of Claim 15, wherein the user-supplied content request received from the user comprises a Hypertext Transfer Protocol (HTTP) request containing a Uniform Resource Locator (URL) for a particular web page.

17. The method of Claim 15, wherein:

the user-requested content is a particular web page comprising a container that contains the rule; and

the additional content concerning the item is incorporated into the web page to replace the container.

18. The method of Claim 15, wherein:

the rule comprises one or more conditions concerning the item; and

the method further comprises applying the conditions to the availability data to determine which content concerning the item to retrieve.

19. The method of Claim 15, wherein the rule comprises a function call.

20. The method of Claim 15, wherein the availability data is selected from the group consisting of:

inventory information concerning the item;

delivery information concerning the item; and

pricing information concerning the item.

21. The method of Claim 15, wherein the availability data comprises dynamic pricing information for the item obtained from multiple suppliers of the item and content concerning the item is rendered reflecting the least of these prices in accordance with a promising policy.

22. The method of Claim 15, further comprising:  
receiving the availability request;  
obtaining the availability data from one or more suppliers; and  
communicate the availability data for use in rendering the user-requested content.

23. The method of Claim 15, further comprising:  
generating a notification in response to a change in availability data for an item; and  
selecting alternative additional content concerning the item in response to the notification.

24. The method of Claim 15, further comprising generating a notification in response to a change in availability data for an item to allow personnel to adjust a policy with respect to the item.

25. The method of Claim 15, wherein:  
the item comprises multiple components; and  
the availability data comprises availability data for one or more components of the item.

26. The method of Claim 15, wherein the retrieved content concerning the item comprises information selected from the group consisting of:  
an advertisement;  
a promotion; and  
an item recommendation.

27. The method of Claim 15, wherein the additional content concerning the item comprises one or more item recommendations and the method further comprises determining the most desirable item recommendation according to one or more sorting criteria, the additional content being rendered according to that determination.

28. The method of Claim 15, wherein the sorting criteria are selected from the group consisting of:

availability for the item to which the recommendation is directed;

profitability for the item to which the recommendation is directed;

one or more other performance indicators associated with the item that a seller wishes to optimize; and

a characteristic of a user to which the recommendation is to be presented.

29. Software for rendering content according to availability data for at least one item, the software being embodied in a computer-readable medium and operable to:

receive a content request from a user in a current interactive session;

retrieve the user-requested content in response to the user-supplied content request;

identify at least one rule within the user-requested content and concerning the item;

generate at least one availability request that corresponds to the rule and that concerns the item;

receive availability data for the item;

retrieve additional content according to the availability data for the item, where the additional content is selected from among one or more stored content elements that concern the item;

incorporate the additional content concerning the item into the user-requested content;

render the user-requested content, including the additional content concerning the item; and

communicate the rendered user-requested content to the user in the current interactive session to satisfy the user-supplied content request.

30. A system for rendering content according to availability data for at least one item, comprising:

means for receiving a content request from a user in a current interactive session and for retrieving the user-requested content in response to the user-supplied content request;

means for identifying at least one rule within the user-requested content and concerning the item;

means for generating at least one availability request that corresponds to the rule and that concerns the item, receiving availability data for the item, retrieving additional content according to the availability data for the item, where the additional content is selected from among one or more stored content elements that concern the item, and incorporating the additional content concerning the item into the user-requested content;

the means for identifying the rule comprising means for rendering the user-requested content, including the additional content concerning the item; and

the means for receiving the user-supplied content request comprising means for communicating the rendered user-requested content to the user in the current interactive session to satisfy the user-supplied content request.

31. The software of Claim 29, wherein the server comprises a web server and the user-supplied content request comprises a Hypertext Transfer Protocol (HTTP) request containing a Uniform Resource Locator (URL) for a particular web page.

32. The software of Claim 29, wherein:

the user-requested content is a particular web page comprising a container that contains the rule; and

the additional content concerning the item is incorporated into the web page to replace the container.

33. The software of Claim 29, wherein:  
the rule comprises one or more conditions concerning the item; and  
the software is further operable to applying the conditions to the availability data to determine the content element concerning the item to retrieve.
34. The software of Claim 29, wherein the rule comprises a function call.
35. The software of Claim 29, wherein the availability data is selected from the group consisting of:  
inventory information concerning the item;  
delivery information concerning the item; and  
pricing information concerning the item.
36. The software of Claim 29, wherein the availability data comprises dynamic pricing information for the item obtained from multiple suppliers of the item and content concerning the item is rendered reflecting the least of these prices in accordance with a promising policy.
37. The software of Claim 29, further operable to:  
receive the availability request;  
obtain the availability data from one or more suppliers; and  
communicate the availability data for use in rendering the user-requested content.

38. The software of Claim 37, further operable to:  
generate a notification in response to a change in availability data for an item; and  
select alternative additional content concerning the item in response to the notification.

39. The software of Claim 37, further operable to generate a notification in response to a change in the availability data for an item to allow personnel to adjust a policy with respect to the item.

40. The software of Claim 29, wherein the item comprises multiple components and the availability data comprises availability data for one or more components of the item.

41. The software of Claim 29, wherein additional content concerning the item comprises information selected from the group consisting of:

an advertisement;  
a promotion; and  
an item recommendation.

42. The software of Claim 29, wherein additional content concerning the item comprises one or more item recommendations and the software is further operable to determine the most desirable item recommendation according to one or more sorting criteria and to render the additional content according to that determination.

43. The software of Claim 42, wherein the sorting criteria are selected from the group consisting of:

availability for the item to which the recommendation is directed;

profitability for the item to which the recommendation is directed;

one or more other performance indicators associated with the item that a seller wishes to optimize; and

a characteristic of the user to which the recommendation is to be presented.

**Appendix B - Evidence Appendix**

**(37 C.F.R. § 41.37(c)(1)(ix))**

No evidence is being submitted under 37 C.F.R. §§ 1.130, 1.131, or 1.132.

**Appendix C – Related Proceedings Appendix**

**(37 C.F.R. § 41.37(c)(1)(x))**

There are no known appeals, interferences, or judicial proceedings that are related to or that will directly affect, be directly affected by, or have a bearing on the Board's decision regarding this Appeal. Accordingly, no decisions on related appeals are being submitted.